

## From the President...

**G**reetings, NABO Members:  
The 83<sup>rd</sup> General Meeting of the National Board of Boiler & Pressure Vessel Inspectors & ASME will convene on May 11, 2014 at the Hyatt Regency in Bellevue Washington. The theme this year is Safety-Quality through Commitment. This statement has a long reaching impact, from the boiler or pressure vessel manufacturer to the owner/user and others that maintain and inspect these objects for safety compliance. All are links in the chain that require our commitment to safety. We are only as strong as our weakest link, which is why it is imperative that we all are committed to proper installation, operation, maintenance and inspection of boilers and pressure vessels.

The 2003 Summer Edition of the National Board Bulletin featured an article titled "Nine Boiler Accidents That Changed the Way We Live". This article can be found summarized below, as part of this newsletter. It is a brief glimpse of where we have come from, to where we are and the constant need for improvement as our industry grows and becomes more complex.

1. **Hartford Fales and Grey Car Works, Hartford, Connecticut:** This explosion occurred on Thursday, March 2, 1854. Nine people were killed instantly, and several more died later, as a result of injuries sustained when an unattended boiler failed catastrophically.
2. **Sultana, on the Mississippi River, outside Memphis, Tennessee:** The year was 1865 when the steamboat *Sultana*, carrying a load of approximately 2,000 people, left Vicksburg, Mississippi, transporting many surviving Union soldiers who were returning home from the war. One of the steamer's boilers exploded just outside of Memphis, resulting in the death of approximately 1,800 people.
3. **Grover Shoe Factory, Brockton, Massachusetts:** March 20, 1905, accident contained just as much deadly force. Another instance of a boiler left unattended, the unfortunate result was an overheated boiler that exploded and tore through the roof of the four-story shoe factory, killing 58 people.
4. **American Sheet and Tin Plate co. Canton Ohio:** Of the seven boilers in the complex at American Sheet and Tin Plate, three failed simultaneously on May 17, 1910. Death toll estimates ranged from 15-17, with an additional 50 people injured.
5. **New York Telephone Company, New York, New York:** October 3, 1962, boiler accident left 23 dead and 94 injured.
6. **Gate City Day Care Center, Atlanta, Georgia:** October 13, 1980, The explosion occurred less than an hour after the boiler had been started for the first time during the heating season. The result was the tragic death of one adult and four children, seven other children were seriously injured.
7. **Star Elementary School, Spencer Oklahoma:** January 19, 1982, one of the most tragic explosions in recent memory occurred. Six children and one adult were killed instantly, and an additional 42 other people were injured, when an 80-gallon water heater exploded at Star Elementary.
8. **Mohave Power Plant, Laughlin, Nevada:** Though not a boiler explosion in the technical sense of the phrase, the rupture of a hot re-heat pipe at the Mohave Generating Station, nonetheless, had a lasting impact on the boiler and pressure vessel industry. Six workers died and 12 were injured on June 9, 1985, when the 30-inch-diameter pipe ruptured without warning, creating a 6' x 8' fish mouth opening, larger than the size of an average human being! Those killed

were caught by the sudden release of 600 pounds of steam pressure (reaching temperatures up to 1,000 degrees F.).

9. **Medina County Fair, Medina, Ohio:** Five people died and another 48 were injured when an antique steam tractor catastrophically failed, lifting the 18-ton structure ten feet in the air and raining hot soot and shrapnel on a crowd of fairgoers, as well as engulfing those nearest the tractor in live steam.

## Conclusion

Though boiler accidents have been an unfortunate and common part of history ever since the Industrial Revolution of the 19th century, the proliferation of today's more stringent rules and regulations have helped to combat the frequency of such tragedies. Nonetheless, as the Medina accident illustrates, the potential for the kind of gruesome fatalities of yesterday still exists in today's modern world. An axiom that was true 100 years ago is still true today: disaster can strike at any time. In fact, many of the victims in the boiler accidents above were simply going about their daily lives, eating lunch, supervising children at play, or awaiting the start of a county fair. Due to the past frequency of such tragedies, it is impossible to comprise an all-encompassing list of the

worst boiler accidents ever. After all, even the smallest boiler accident, barely significant on a national or international scale, could be the most tragic if the victim is a loved one. The widow and children of farmer Zeke Kelly could have certainly attested to this fact, after the beloved husband and father died in a small boiler explosion at a Virginia gristmill.

Though the tragedies of the past are certainly difficult to evaluate, in each of the instances above, we can take at least some small comfort in the fact that the loss of life was not completely in vain. Out of the ashes of death and destruction arose necessary safeguards — and in some cases even legislation — to protect future generations from tragedy. ❖

**For questions, comments  
or submissions  
please visit  
[www.nabomembers.com](http://www.nabomembers.com)**

## Crown Boiler recalls home heating boilers

***Consumers should stop using this product unless otherwise instructed. It is illegal to resell or attempt to resell a recalled consumer product.***

**Name of product:** Gas-fired hot water boilers

**Hazard:** The air pressure switch can fail to shut down the burners in the event that there is a blockage in the vent system allowing the boiler to emit excessive amounts of carbon monoxide, posing a CO poisoning hazard to the consumer.

**Remedy:** Repair

**Consumer Contact:**

Crown Boiler Company toll-free at (855) 688-0776 from 8 a.m. to 5 p.m. ET, e-mail

cap@crownboiler.com or online at [www.crownboiler.com](http://www.crownboiler.com) and click on CPSC Product Recall Announcement for more information.

**Units:** About 2,200

**Description:** This recall involves Crown Boiler CWD series cast iron hot water boilers that use natural gas or liquid petroleum to heat water in home baseboard, floor or radiator heating systems. The boilers are red and gray, about 37 inches tall, about 23 inches deep and range from about 16 to 42 inches wide.

The Crown Boiler logo is on the front of the boiler. Recalled boilers have model numbers that begin with CWD and were manufactured between May 1, 2005 and July 1, 2013. The model number and the manufacturing date are located on a white rating

*Continued on Page 3*



**Recalled CWD series natural gas and liquid petroleum hot water boilers were manufactured between May 2005 and July 2013.**

label located on the upper right side of the boiler. The manufacturing date appears under “Series” in the MM/DD/YYYY or M/D/YYYY format or as a two-letter code. Recalled models have dates between 5/1/2005 and 7/1/2013 or one of the following two-letter codes: EB, FB, GB, HB, IB, JB, KB, LB, AC, BC, CC, DC, EC, FC, GC, HC, IC, JC, KC, LC, AD, BD, CD, DD, ED, FD, GD, HD, ID, JD, KD, LD, AE, BE, CE, DE, EE, FE, GE, HE, IE, JE, KE, LE, AF, BF, CF, DF, EF, FF, GF, HF, IF, JF, KF, LF, AG, BG, CG, DG, EG, FG, GG, HG, IG, JG, KG, LG AH, BH, CH, DH, EH, FH, GH, HH, IH, JH, KH, LH, AI, BI, CI, DI, EI, FI, GI, HI, II, JI, KI, LI, AJ, BJ, CJ, DJ, EJ, FJ.

**Incidents/Injuries:** None reported.

**Remedy:** Consumers with recalled boilers should immediately contact the installer or distributor from whom they purchased the boiler or Crown Boiler to schedule a free in-home repair. Consumers who continue using the boilers while awaiting repair, should have a working carbon monoxide alarm installed outside of sleeping areas in the home.

**Sold at:** Plumbing and heating wholesale distributors nationwide from May 2005 through July 2013 for

between \$4,000 and \$6,700.

**Manufacturer:** Crown Boiler Company, of Philadelphia

**Manufactured in:** United States

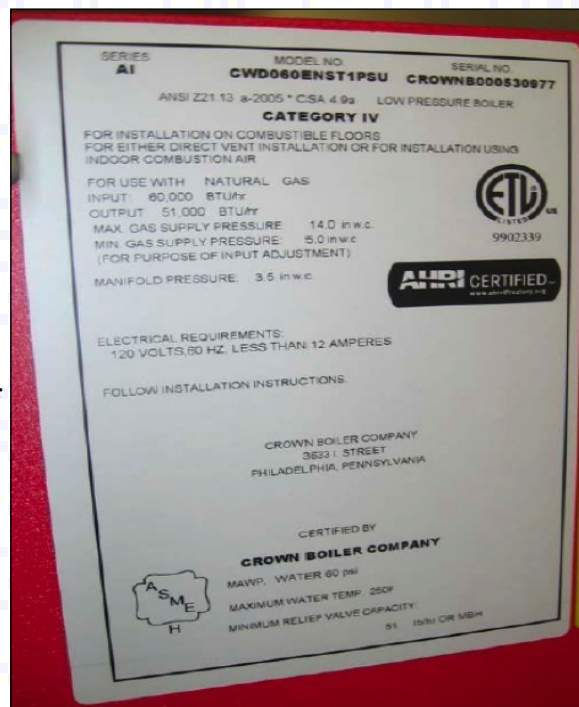
The U.S. Consumer Product Safety Commission is charged with protecting the public from unreasonable risks of injury or death associated with the use of thousands of types of consumer products under the agency’s jurisdiction. Deaths, injuries, and property damage from consumer product incidents cost the nation more than \$1 trillion annually. CPSC is committed to protecting consumers and families from products that pose a fire, electrical, chemical or mechanical hazard.

CPSC’s work to help ensure the safety of consumer products – such as toys, cribs, power tools, cigarette lighters and household chemicals — contributed to a decline

in the rate of deaths and injuries associated with consumer products over the past 40 years.

Federal law bars any person from selling products subject to a publicly-announced voluntary recall by a manufacturer or a mandatory recall ordered by the Commission.

To report a dangerous product or a product-related injury go online to [www.SaferProducts.gov](http://www.SaferProducts.gov) or call CPSC’s Hotline at (800) 638-2772 or teletypewriter at (301) 595-7054 for the hearing impaired. Consumers can obtain news release and recall information at [www.cpsc.gov](http://www.cpsc.gov), on Twitter @OnSafety or by subscribing to CPSC’s free e-mail newsletters.



**The model number and the manufacturing date are located on a white rating label located on the upper right side of the boiler.**

# Fu San Machinery Recalls Low Lead Ball Valves

The U.S. Consumer Product Safety Commission, in cooperation with the firm named below, today announced a voluntary recall of the following consumer product. Consumers should stop using recalled products immediately unless otherwise instructed. It is illegal to resell or attempt to resell a recalled consumer product.

**Name of Product:** Low Lead Ball Valve/Shut-Off Gas Valves

**Units:** About 163,000

**Importer/Distributor:** Aqualine, of Corona, Calif.; AY McDonald Manufacturing Co., of Dubuque, Iowa; FNW, of Portland, Ore.; Hodes Co., of Kansas City, Mo.; Legend, of Auburn Hills, Mich; Leonard Valve, of Cranston, R.I. and Mueller of Memphis, Tenn.

**Manufacturer:** Fu San Machinery Co. Ltd., of Taiwan

**Hazard:** The valves can crack and cause gas to leak. This poses fire and explosion hazards.

**Incidents/Injuries:** None reported.

**Description:** This recall involves seven brands of sweat and threaded, low lead ball valves used in flammable gas piping systems used in commercial or residential settings. They are brass shut-off valves assembled with pipe lines of 3/4 inch and 1 inch and have a date code 1103 through 1112, in YYMM format, where YY is the year and MM is the month. The date code is located under the valve handle. The pipe size is marked on the body of the valve. Fu San’s logo and the “O” marking designated for low lead valves are marked on the valves’ neck under where the handle assembles. The word “Taiwan” appears on the handle as a country of origin marking. The valves were sold under the following brand names and model numbers:

	FNWX411F	3/4 inch/Sweat
	FNWX411G	1 inch/Sweat
Hodes Co.	40-642	1 inch/Threaded
	40-662	1 inch /Threaded
	40-677	3/4 inch/Sweat
	40-687	3/4 inch/Sweat
	40-678	1 inch/Sweat
	40-688	1 inch/Sweat
Legend	T1002NL	1 inch/Threaded
Leonard Valve	83503	3/4 inch/Sweat
	83504	1 inch/Sweat
	83538	3/4 inch/Threaded
	83539	1 inch/Threaded
Mueller	107-844NL	3/4 inch/Sweat

**Sold by:** Fu San Machinery directly to seven distributors nationwide from April 2011 through January 2012 for between \$13 and \$20.

Manufactured in: Taiwan

**Remedy:** Consumers should turn off the gas supply until a replacement gas valve has been professionally installed. Consumers should contact Danville Sales which, on behalf of Fu San Machinery, will provide compensation of \$300 to reimburse customers for costs incurred to remove and return the valve and for purchasing and installing a replacement valve. The affected valve should be returned to the Danville Sales Office for Fu San Machinery with a photo depicting the valve in the gas line before removal and showing the date code on the valve, along with the address and details of the location where the valve was installed. The requested information, the recalled valve, and the consumer name and address should be sent to the address in the Consumer Contact paragraph. Upon receipt, Fu San will reimburse customers in the amount of \$300.

**Consumer Contact:** Danville Sales Office for Fu San Machinery, 1101 N. Kings Hwy, Cherry Hill, NJ 08034; toll-free at (855) 779-9200, from 9 a.m. to 5 p.m. ET Monday through Friday, or online at [www.fsvalve.com.tw](http://www.fsvalve.com.tw), then click on the Safety Recall Notice button for more information. *Continued on Page 5*

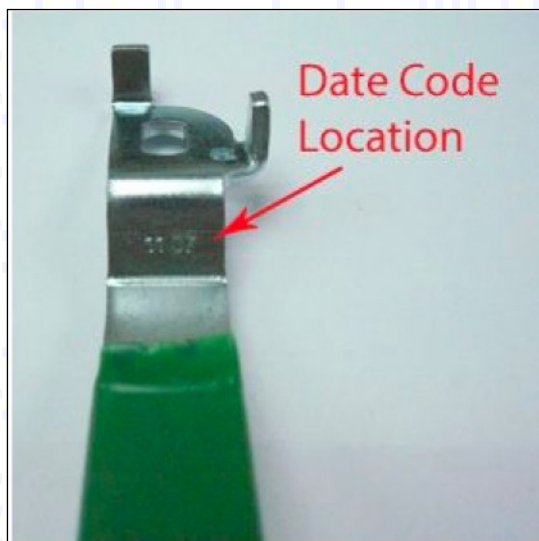
Brand Name	Model Number	Valve Dimensions/ Sweat or Threaded Valves
Aqualine	BBV-075-LF	3/4 inch/Threaded
	BBV-075S-LF	3/4 inch/Sweat
	BBV-100-LF	1 inch/Threaded
	BBV-100S-LF	1 inch/Sweat
AY McDonald	72032S	3/4 inch/Sweat
	72032T	3/4 inch/Threaded
FNW	FNWX410AF	3/4 inch/Threaded
	FNWX410AG	1 inch/Threaded



**Valve Front Side**



**Valve Back Side**



**Valve Handle with Date Code**

## ***Valves installed in Flammable Gas Lines. Recall due to fire and explosion hazard***

### **Air Compressors Recalled by MAT Industries Due to Shock Hazard**

**Each of the two-gallon HDX and Powermate air compressors has a pair of one-gallon tanks stacked upon each other.**

**Consumers should stop using this product unless otherwise instructed. It is illegal to resell or attempt to resell a recalled consumer product.**

**Recall date:** February 12, 2014

**Recall number:** 14-105

**Recall Summary:**

**Name of product:** HDX™ and Powermate® two-gallon air compressors

**Hazard:** The terminals of the pressure switch can come into contact with the motor housing and electrify the air compressors, posing a shock hazard to consumers.

**Remedy:** Repair

**Consumer Contact:** Industries toll-free at (855) 922-2300 from 9 a.m. to 5 p.m. CT Monday

through Friday or online at [www.powermate.com](http://www.powermate.com) and click on Air Compressors, then VSP0000201 and online at [www.homedepot.com](http://www.homedepot.com) and click on Product Recalls for more information.

Report an Incident Involving this Product

**Recall Details:**

**In conjunction with:**

Canada

**Units:** About 100,000 in the United States and 7,000 in Canada

**Description:** This recall involves HDX™ and Powermate® brand two-gallon electric air compressors. Each air compressor has a pair of one-gallon tanks that are stacked upon each other. The air compressors are 120-volts, have an operating pressure maximum of 100 PSI and air delivery of .4 SCFM at 90 psi. The HDX™ air compressors are gray with HDX printed in white on the top cylinder. HDX™ model number/sku numbers include

VSP0000201.HDX, VSP0000201.HDX1 and 947282, with numeric serial numbers. The model and serial numbers are printed on a sticker on the back of the top air compressor cylinder. The Powermate® air compressors are red with Powermate printed in white on the top cylinder. HDX or Powermate compressors with a letter in the serial numbers are not included.

Powermate® model numbers include VSP0000201, VSP0000201.01, VSP0000201.KIT and VSP0000201.NS with numeric serial numbers.

Incidents/Injuries: None reported

**Remedy:** Consumers should immediately stop using the recalled air compressors and contact MAT Industries for a free repair.

**Sold at:** The Home Depot and online at homedepot.com (HDX air compressors only), Menards and other stores (Powermate air compressors) nationwide from June 2010 through October 2013 for between \$80 and \$120.

**Importer:** MAT Industries LLC, of Long Grove, Ill.

Manufactured in: China

The U.S. Consumer Product Safety Commission is charged with protecting the public from unreasonable risks of injury

or death associated with the use of thousands of types of consumer products under the agency's jurisdiction. Deaths, injuries, and property damage from consumer product incidents cost the nation more than \$1 trillion annually. CPSC is committed to protecting consumers and families from products that pose a fire, electrical, chemical or mechanical hazard.

CPSC's work to help ensure the safety of consumer products - such as toys, cribs, power tools, cigarette lighters and household chemicals -- contributed to a decline in the rate of deaths and injuries associated with consumer products over the past 40 years.

Federal law bars any person from selling products subject to a publicly announced voluntary recall by a manufacturer or a mandatory recall ordered by the Commission.

To report a dangerous product or a product-related injury go online to [www.SaferProducts.gov](http://www.SaferProducts.gov) or call CPSC's Hotline at (800) 638-2772 or teletypewriter at (301)

595-7054 for the hearing impaired. Consumers can obtain news release and recall information at [www.cpsc.gov](http://www.cpsc.gov), on Twitter @OnSafety or by subscribing to CPSC's free e-mail newsletters.



HDX air compressor



HDX air compressor label with model and serial number



Powermate air compressor



Powermate air compressor label with model and serial number numbers

## Air Receiver Inspection



TECHNICAL BULLETIN 01-2014

REV. 0/2-4-2014

### I. Introduction:

Air receivers, commonly known as air tanks, are an essential component of many industrial operations. They can also be one of the most dangerous pressure vessels in an industrial setting, if they are

not properly maintained and routinely inspected by qualified personnel. The intent of this bulletin is to provide information on the most common causes of failures in air tanks and what can be done to ensure their operational safety.

### II. Purpose and Hazards of Air Receivers:

The purpose of an air receiver, or tank, is to store a volume of air under pressure. This is necessary to obtain a constant supply of air at a continuous pressure for purposes such as operating pneumatic power tools, airing up tires, operating pneumatic

control valves, etc. The primary hazard that compressed air represents is that it contains latent energy. When this latent energy is released in an uncontrolled fashion, such as in the bursting of an air receiver or its connected piping, the resultant collateral damage from the burst can be, and usually is, devastating. Another potential hazard associated with air receivers is the potential for compressed air fires within the compressed air system. This is typically the result of excessive amounts of compressor oil within the air receiver and/or piping, in the presence of an oxygen enriched environment (i.e. compressed air has a higher concentration of oxygen than uncompressed air of the same volume) and potential static ignition. Compressed air fires are usually even more devastating, due to the added thermal release.

### III. Types of Air Receiver Tanks and Systems:

- a. Air Tanks with Mounted Compressor(s) – The most common type of air tanks are those that have one or more compressors mounted on the tank. These types of compressed air systems include portable units that are mounted on wheels so that they can be easily moved from one location to another, as well as larger units that are permanently mounted with fixed piping systems for air distribution to points of use. Following are illustrations of typical equipment.



*Vertical*



*Horizontal*

### *Permanently Mounted Air Receiver/Compressor Units*

- b. Stand-Alone Air Receivers – Larger compressed air systems utilize air receivers that are permanently mounted, but are piped to one or more skid mounted air compressors. These air receivers may be horizontally or vertically mounted, depending on plant configurations and available horizontal/vertical space.



*Typical Portable Air Receiver with Mounted Compressor*

### IV. Typical Causes of Air Receiver Failures:

- a. Tank Pressure Ruptures – Tank pressure ruptures are typically the result of over pressurization as the result of the use of an incorrect relief valve, cracking in areas of high stress such as compressor mounting saddles, foundation structures, etc. and thinning of the end heads or shell from internal and/or external corrosion or gouging of the tank. Following is a picture of a pressure rupture in a portable air tank.



*Over-Pressurization Rupture*



***Air System Fire Induced Rupture***

- b. Air System Fire Induced Ruptures  
– Air fire induced failures are typically the result of excessive compressor oil within the air system resulting from over-worn compressors, improperly operating water/oil separators and improper grounding of the air receiver. Ignition of entrained compressor oil can also occur as the result of inoperative compressor intercoolers, which allows the temperature of the air leaving the compressor to rise above the ignition point of the oil. Following is a photo showing an air receiver that failed as the result of an internal fire.

V. Equipment Inspection Procedures:

Compressed air vessels include receivers, separators, filters, and coolers should be regularly inspected. Considerations of concern include temperature variances, pressure limitations, vibration, and condensation. Drain connections should be verified to be free of any foreign material that may cause plugging. Inspection should consist of the following:

- i. Welds Inspect all welds for cracking or gouging, corrosion, and erosion. Particular attention should be given to the welds that attach brackets supporting the compressor, for those air receivers with mounted compressors. These welds may fail

due to vibration and/or stress raisers caused during the process of attaching the saddles of brackets to the receiver tank.

- ii. Shells/Heads - Externally inspect the base material for environmental deterioration and impact from objects, such as gouging. Hot spots and bulges are signs of overheating and should be noted and evaluated for acceptability. Particular attention should be paid to the lower half of the vessel for corrosion and leakage. For vessels with manways or inspection openings, an internal inspection should be performed for corrosion, erosion, pitting, excessive deposit buildup, and leakage around inspection openings. UT thickness testing may be used where internal inspection access is limited or to determine actual thickness when corrosion is suspected. Thickness readings should be compared to minimum thickness for shells and heads shown on the manufacturer's data plate. Thickness readings should be taken of both heads and at various points on the shell, preferably near the bottom where corrosion is typically more prevalent. Thickness readings should be taken annually and comparison made to prior readings to determine if thinning has occurred. Frequency of thickness testing may be extended if results indicate that little or no thinning has occurred over time, as long as results indicate that thickness is greater than the minimum required or nominal thickness shown on the data plate.
- iii. Fittings and Attachments inspect all fittings and attachments for alignment, support, deterioration, damage, and leakage around threaded joints. Any internal attachments such as supports, brackets, or rings should be visually examined for wear,



- corrosion, erosion, and cracks;
- iv. Relief Valves and Other Overpressure Protective Devices- Check the vessel nameplate to determine the maximum allowed working pressure and temperature of the vessel. Ensure the set pressure of the safety valve does not exceed the maximum allowable working pressure (MAWP) shown on the vessel nameplate and determine that the capacity of the safety valve is greater than the capacity of the connected compressor(s). Manufacturers post the capacities of their compressors by model number on their website. The relief valve should be periodically manually lifted, to ensure that it is mechanically free to lift. It should be removed and bench tested by a qualified relief valve repair shop, or replaced, at least once every five years. If a rupture disk is used, in conjunction with or in lieu of a relief valve, it should be physically inspected and replaced if there are signs of corrosion or other deterioration. All overpressure protective devices must bear the ASME and National Board stamps.
  - v. Drains - Ensure there is a functioning manual or automatic condensate/oil drain. If the drain is automatic, ensure that it is functioning properly. If the drain is manual, ensure that it is periodically opened to remove moisture and oil.
  - vi. Quick-Closure Attachments Filter-type vessels usually have one quick-type closure head for making filter changes. The locking lugs should be periodically inspected for cracking or deterioration.
  - vii. Pressure Gauge – Each air receiver should be fitted with a pressure gauge. This gauge should be graduated at not less than 1 times, or more than four times the maximum working pressure of the air receiver. The gauge should be calibrated annually, or whenever there is reason to question its accuracy. Alternatively, the fitting to which the gauge is attached should be fitted with a

- test gauge connection, or gage cock, to allow verification of the gauge's accuracy with a calibrated test gauge.
- viii. Low Temperature Brittle Fracture – For carbon steel air tanks that are mounted outside and may be subjected to low temperature extremes, external surfaces of the tank should be regularly inspected for signs of cracking as the result of low temperature brittle fracture. Any tank exhibiting signs of cracking should be immediately taken out of service. Alternatively, the tank should be fitted with an insulating jacket to protect the vessel from temperature extremes.
  - ix. Piping Systems – Fixed piping and piping supports on air systems should be regularly inspected for signs of overheating, deterioration, cracking and other defects. This is particularly important for the welded attachments of air system piping to the air receiver.
  - x. Records – Detailed inspection records should be maintained and kept on file for each inspection. Attached is an air receiver inspection checklist that may be used for this purpose, which should be tailored for the specific type of tank being inspected.

***See Air Receiver  
Inspection Check  
List on Page 10***

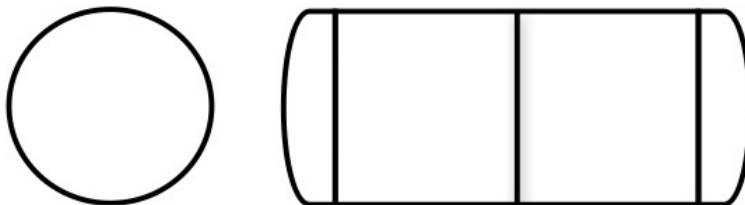
## AIR RECEIVER INSPECTION CHECKLIST

TANK DATA				
Nat'l Bd. No.	Manufacturer	MAWP	Year Built	Inspection Date
Physical Address			Location of Tank in Plant	

GENERAL INSPECTION OBSERVATIONS			
Item Inspected	Satisfactory	Unsatisfactory	Comments/Observations
Condition of Base Material of Heads			
Condition of Base Material of Shell			
Circumferential & Longitudinal Welds			
Saddle and Other Attachment Welds			
Condition of Coating/Preservation			
Pressure Gage Condition			
Relief Device Set and Capacity			
Fittings and Connections			
Condition of Piping and Welds			
Automatic/Manual Drains			
Tank Grounding Provisions			
Internal Tank Surfaces (If Accessible)			
Other (Explain in Comments)			

ULTRASONIC THICKNESS TEST RESULTS					
Test Location	Position 1	Position 2	Position 3	Position 4	Data Plate Nominal T
Head #1					
Head #2					
Shell Course #1					
Shell Course #2					

### ULTRASONIC TEST POSITION



Comments

# Arise Boiler Inspector talks State of Washington Board of Boiler Rules

**By: Harvey Fleck**

**Arise Boiler Inspection and Insurance Company**

I attended the quarterly meeting of the Board of Boiler Rules on Tuesday 25 Feb, 2014 in Tacoma.

The following topics were discussed. Any rules the board approved will come out later as a change or addition to the State of Washington boilers and unfired pressure vessel Laws.

A. Jacketed Steam Kettle. The proper way to determine the size of the Kettle. The volume of the kettle or the volume of the jacket. If the size of the jackets is used, most kettles will be exempt. This topic was held over to the next meeting in May 2014. It was also discussed the volume of the boiler that supply steam to the kettle. A new definition will be coming out about jacket steam kettle on unfired and direct fired kettles.

1. A new place of public assembly definition will be coming soon that will include a few changes. These changes will include a "nursing home" type facilities.
2. Fee increase for certificates- it should not happen this

year.

3. The NB just came out with new inspection requirements for CO2 tanks. It should be in the next addition. The state law of Washington will have to be changed when the state starts this type of inspection which will include piping from the tank to the pop machine. This topic took up most of the time at this two hour meeting. It will be discussed at the next meeting and will not go away because three (3) people were killed because of CO2 vapors last year. The entire CO2 piping system will be inspected because of the public and a CO2 detector will be required at some low point in the system. The inspector will be responsible for the CO2 piping. This is all talk now, but it is coming down the track.
4. One new board member will be appointed by the governor this year.
5. If a paper machine is going to use the TAPPI requirement of a five year inspection for steam dryers they better record the inspections or they must go to the two year cycle for the state law.
6. No hand-outs were given out this meeting.

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## CoEO Meets with Japanese METI Delegation



**Right to left, Chiyo Kobayashi, Hiroyuki Tada and Jerry Sturch CoEO of ABIIC**

On December 19, 2013, Jerry Sturch, ABIIC's Chief of Engineering Operations hosted a meeting at his home field office in Huntersville, North Carolina with representatives Chiyo Kobayashi, CEO and Toshiro Tasaki of Washington CORE and Hiroyuki Tada of Mizuho Information & Research Institute of Tokyo, Japan, who were commissioned by the Japanese Government's Ministry of Economy, Trade and Investment (METI) to complete a study in relation to how pressure equipment is designed, constructed and inspected after installation in North America. The intent of the study is to improve the reliability of

pressure equipment in Japanese Industry. Currently in Japan, it is the Owner/User's responsibility to verify that the manufacturer of a piece of pressure equipment designs and fabricates the boiler or pressure vessel that they are purchasing in accordance with sound practices, such as the Japanese Industrial Standards (JIS). There is currently no structured third party inspection framework, such as that required under ASME Code in North America. Also, there is currently no legal framework in place for post construction inspection of boilers and/or pressure vessels once they have been placed in operation. It is the Owner/User's responsibility to ensure the safe operation of their pressure equipment. It was determined that Japan's current system of ensuring safe construction and operation of pressure equipment places an undue burden on the Owner/User, who is often unfamiliar with design and fabrication of pressure equipment and does not typically have the knowledge and experience to effectively inspect the equipment, once it is installed. During their tour, they also met with Chuck Withers at National Board Headquarters in Columbus, Ohio and Cliff Daudrich, Assistant Bureau Chief of the North Carolina Bureau of Boiler and Pressure Vessel Inspection in Raleigh, North Carolina.



## **NABO Activities**

March 2014  
April 2014  
May 2014

AGRIP Spring Governance & Leadership Conference  
RIMS Annual Conference & Reception  
National Board of Boiler & Pressure Vessel Inspectors Annual  
Conference. ASME Annual Conference

September 2014  
November 2014

NRRA Gold Sponsorship - Annual Conference  
Power-Gen Conference

### **ASME- NB Committee Participation**

2012 Wayne Jones, Chief Engineer reappointed vice chair of NB Subgroup  
for Repairs & Alterations

2012 Ray Snyder appointed to NB General Committee Repairs &  
Alterations

2012 Darryl Peetz appointed to ASME Subgroup General Requirements  
ASME Section XI Welding Committee

2013 Darryl Peetz appointed to ASME BPV Committee on Welding,  
Brazing & Fusion (IX)

2013 Paul Welsh appointed to NBIC Part 2 Subcommittee Inspection ,  
NBIC Part 2 Sub-Group General Inspection & NBIC Part 2 Sub-  
Group Specific Inspection

2013 Wayne Jones reappointed to NBIC Part 3 Sub-Group Repairs/  
Alterations & Vice Chair NBIC Part 3 Sub-Group Repairs/Alterations

**The 2014 National Board Synopsis of Boiler and Pressure  
Vessel Laws, Rules and Regulations are now available in a  
new format online.**

**The Synopsis web page features a dropdown menu  
so users can select a specific jurisdiction and review  
detailed information regarding the current laws, rules,  
and regulations of that jurisdiction. Each online report  
also includes the prevailing requirements, detailed  
contact information, and the regulatory history for each  
jurisdiction. The below link will access the new online  
feature**

**<http://www.nationalboard.org/ViewAllSynopses.aspx>**